

What is claimed is:

1. A mask (1), in particular photomask, for the production of semiconductor devices, comprising at least one product field area (6a) and a compensation structure (5) positioned outside the product field area (6a) characterized in that the compensation structure (5) comprises at least one electroconductive region (8b) which is electrically connected with the product field area (6a).
2. The mask (1), in particular photomask, for the production of semiconductor devices, in accordance with claim 1, wherein – viewed from the product field area (6a) – the electroconductive region (8b) extends path-shaped outwardly.
3. The mask (1), in particular photomask, for the production of semiconductor devices, in accordance with claims 1 or 2, wherein the path (8b) of the electroconductive region has a breadth (d) of between 1 nm and 30 nm or 200 nm and 5  $\mu$ m, respectively, in particular between 1  $\mu$ m and 50  $\mu$ m, e.g. between 5  $\mu$ m and 25  $\mu$ m.
4. The mask (1), in particular photomask, for the production of semiconductor devices, in accordance with claims 1, 2, or 3, wherein the electroconductive region (8b) substantially extends over the entire breadth (b) of the compensation structure (5).
5. The mask (1), in particular photomask, for the production of semiconductor devices, according to any of the preceding claims, comprising a plurality of, in particular more than 10, 100, 1,000 or 10,000, electroconductive regions (8a, 8b) that are electrically connected with the product field area (6a).

6. The mask (1), in particular photomask, for the production of semiconductor devices, according to claim 5, wherein – viewed from the product field area (6a) – the electroconductive regions (8a, 8b) each extend path-shaped outwardly.

7. The mask (1), in particular photomask, for the production of semiconductor devices, in accordance with claims 5 or 6, wherein the plurality of electrical regions (8a, 8b) form a grid structure.

8. The mask (1), in particular photomask, for the production of semiconductor devices, according to any of the preceding claims, wherein the electroconductive region(s) (8a, 8b) is (are) designed of chrome.

9. The mask (1), in particular photomask, for the production of semiconductor devices, according to any of claims 5 to 8, wherein electrically non-conductive regions (9a, 9b) are positioned between the electroconductive regions (8a, 8b).

10. The mask (1), in particular photomask, for the production of semiconductor devices, according to claim 9, wherein at least two non-conductive regions (9a, 9b) have differing depths ( $t_0$ ,  $t_1$ ).

11. The mask (1), in particular photomask, for the production of semiconductor devices, according to claim 10, wherein a respective plurality of electrically non-conductive regions (9a, 9b) that are positioned side by side, in particular more than 3, 50, or 500 electrically non-conductive regions (9a, 9b) that are positioned side by side, alternatingly have respectively differing depths ( $t_0$ ,  $t_1$ ).

12. The mask (1), in particular photomask, for the production of semiconductor devices, according to any of claims 9 to 11, wherein the electrically non-conductive regions (9a, 9b) are designed of quartz.

13. The mask (1), in particular photomask, for the production of semiconductor devices, according to any of claims 9 to 12, wherein the electrically non-conductive regions (9a, 9b) that are positioned between the electroconductive regions (8a, 8b) have a rectangular, in particular square, or a round or oval, respectively, cross-section.

14. The mask (1), in particular photomask, for the production of semiconductor devices, according to any of the preceding claims, wherein the compensation structure (5) is formed around the at least one, or around the at least one and around further, product field areas (6a, 6b).

15. The mask (1), in particular photomask, for the production of semiconductor devices, according to claim 14, wherein the compensation structure (5) is frame-shaped.

16. The mask (1), in particular photomask, for the production of semiconductor devices, according to any of the preceding claims, said mask comprising a quartz and/or a chrome layer (2, 3).

17. The mask (1), in particular photomask, for the production of semiconductor devices, according to any of the preceding claims, wherein the mask (1) is an alternating phase shift mask, or a chromeless or a CPL (chromeless phase etch lithography) mask, respectively.

18. A method for the production of masks, in particular for the production of alternating phase shift masks, or of chromeless phase shift masks or phase shift masks structured by quartz etching, respectively, comprising at least one

product field area (6a) and a compensation structure (5) positioned outside the product field area (6a), characterized in that the method comprises the step: providing of the compensation structure (5) with at least one electroconductive region (8b) which is – in the finished state of the mask – electrically connected with the product field area (6a).